

News

Ten per cent of English girls have HPV by age of 16, survey shows

Owen Dyer

London

By the age of 16 at least 10% of girls in England have become infected with one or more strains of the human papillomavirus (HPV), a major study of HPV prevalence in girls and young women has shown.

Researchers from the Health Protection Agency tested 1483 women and girls aged 10 to 29 years from across England for four strains of the virus: types 6, 11, 16, and 18. Types 6 and 11 are associated with genital warts in particular, while types 16 and 18 are thought to be causative agents in an estimated 70% of cervical cancers. Their findings are reported in the *British Journal of Cancer* (doi: [10.1038/sj.bjc.6603955](https://doi.org/10.1038/sj.bjc.6603955)).

A separate modelling study by the Health Protection Agency indicates that up to 70% of cases of cervical cancer and 95% of cases of genital warts in men and women could be prevented if vaccination against HPV were included in the United Kingdom's national immunisation programme. Both studies were presented at the Health Protection Agency's recent annual conference at Warwick University.

The prevalence study shows that rates of infection with HPV in England are very similar to those previously measured in the United States. Age standardised seroprevalence rates in women aged 10-29 were 10.7% for HPV 6, 2.7% for HPV 11, 11.9% for HPV 16, and 4.7% for HPV 18. Overall, 20.7% of those surveyed tested seropositive for one of the four assayed types.

The test detects seroconversion, which may signal either current or past infection. Not all women who contract HPV undergo seroconversion, the authors note, and they say that the figures may underestimate the actual rates of infection by up to 50%.

The blood samples were tested by Merck and Co, one of two pharmaceutical companies to develop an HPV vaccine. Merck's Gardasil is currently being adopted by immunisation programmes in the US, Canada, and Australia.

Mark Jit of the Health Protection Agency, who led the modelling study, said its findings indicated that an immunisation programme would justify its cost if the vaccine could provide 20 years' protection. "However, there are still uncertainties in the model," he added. "If a decision is made to proceed with HPV vaccination, then follow-up of vaccinated women for several decades will be important to verify predictions about the long term impact of vaccination."

The government announced in June that it agreed "in principle" with a recommendation from the Joint Committee on Vaccination and Immunisation that girls aged 12 and 13 should be vaccinated against oncogenic strains of HPV. But any vaccination programme would be unlikely to have an effect on the incidence of cervical cancer for at least 10 years, cautioned Pat Troop, chief executive of the Health Protection Agency.

Even then, she said, cervical cancer screening would remain important and would be the best way for women who are unvaccinated against HPV to reduce their risk of cervical cancer. "Current vaccines do not protect against all HPV types that cause cervical cancer,

and screening will remain the best way to protect against disease caused by these other types," she said.